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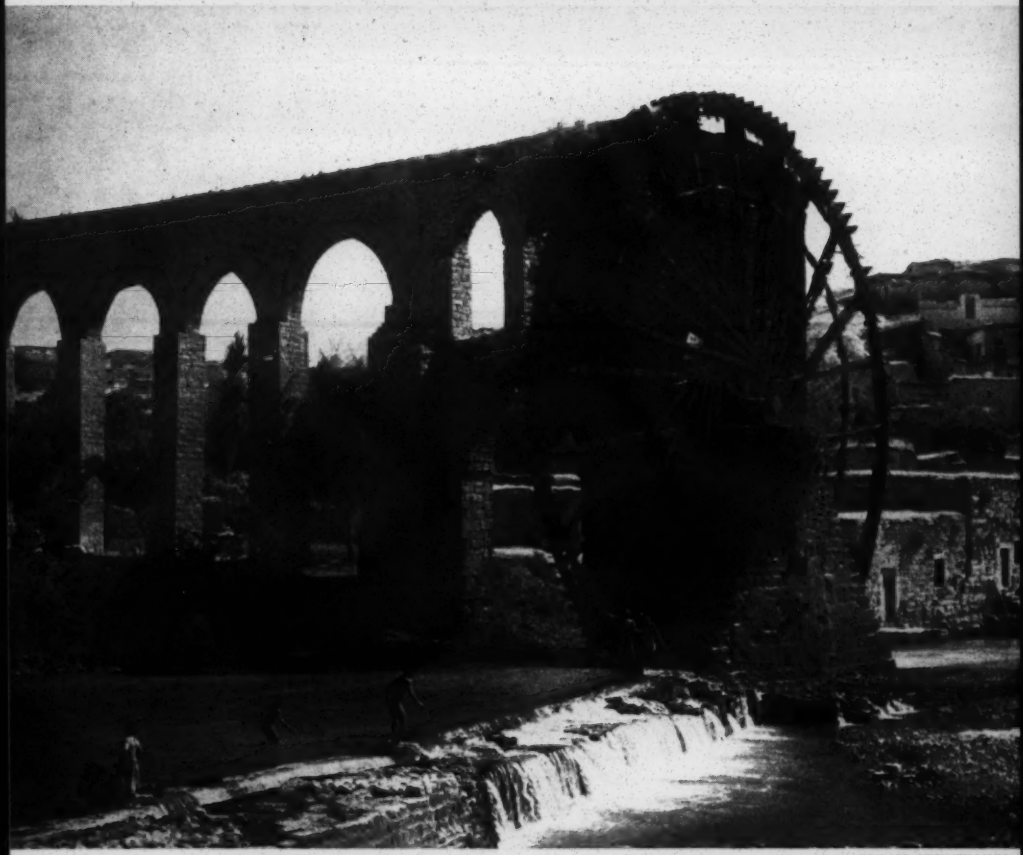

MAYNARD OWEN WILLIAMS

13 *Young Syrians swim beside Hama's 70-foot water wheel. It fills the aqueduct that feeds homes and gardens*

► Syria Captures World Attention

► Sunspots Play Tricks

► Spain's Balearic Isles

► Americans Remember Lafayette

► Appalachian Trail

What's Ahead? Next week central Africa, Arkansas, and bird migration. On the horizon, the new Northwest Passage, Mexico, Saudi Arabia, the coelacanth, an entire issue on oil.

Damascus, its capital, or from any of 4,000,000 Syrians, suddenly becomes important.

Roughly the size of North Dakota, Syria wedges inland from the eastern end of the Mediterranean. Most of it is desert. The Euphrates River cuts across northeastern Syria on its way from Turkey to Iraq. Northward, Turkey's Asian shoulder humps between Syria and the Soviet Union. Iraq and Jordan lie to the east and south. Mountainous Lebanon separates Syria from the Mediterranean—except for a coastline of about 85 miles with one notable port, Latakia.

Some near neighbors drip with oil—Iran, Saudi Arabia, and other countries of the Arabian Peninsula. One vital pipeline crosses Syria on the way from Iraq to the Lebanon coast. Other Near-Eastern nations quiver with tension. Egypt lies to the southwest, Israel across the Sea of Galilee.

Perched on the old land bridge joining the continents of Europe, Asia, and Africa, Syria has long felt the sweep of new ideas, the sway of changing emotions. Egypt ruled there in the days of its glory. Assyrians, Babylonians, Persians, Greeks, and Romans held the reins as Syria's history moved on.

Traders and warriors crossed Syria's caravan routes. They gathered at Aleppo —still a trade center—and brought prosperity to the oasis of Palmyra, where Queen Zenobia ruled.

A parade of religious beliefs followed the caravans. Rome and Greece took Syria's earthy gods into their own pantheons. The Apostle Paul brought Christianity after being converted by a vision along the road to Damascus. The belief flowered quickly and five Syrians became Pope during the Dark Ages.

Then Islam rose to the south. In 635 A.D. Damascus fell to the followers of the recently dead Prophet Mohammed. Christians tried to restore their faith during long, bitterly-contested Crusades. They conquered Syria's coast and left fortresses that still dot the region with weather-worn ruins. But a stout-hearted Saracen leader arose to force the Crusaders from their short-lived Kingdom of Jerusalem (on the present-day Jordan-Israel border). This hero of Islam, Saladin, lies buried in modern Damascus. An Arab, right, clad in Western-style clothes, pauses to read his Koran beside Saladin's tomb.

NATIONAL GEOGRAPHIC PHOTOGRAPHER DAVID S. BOYER

Syria's caravan routes were abandoned after Europeans discovered and opened up the sea lanes to India and China. Ruled by Ottoman Turks until the end of World War I, the country was isolated from the West. Then a French mandate took control between the two World Wars, restoring an awareness of European ways.

MAYNARD OWEN WILLIAMS

SYRIA—

The World Watches a Smoldering Spark in the Near Eastern Tinderbox

ON A cobbled Damascus street, above, two Syrians pass the time of day over a donkeyload of chickens. And all over the world, statesmen would give their ears to hear what is being said. For Syria holds a key position in a key region—the Near East. Bristling with Soviet arms, its army commanded by a pro-Soviet officer, Syria could cause turmoil among its uneasy neighbors—and thence throughout the world. Every murmured opinion from the streets of

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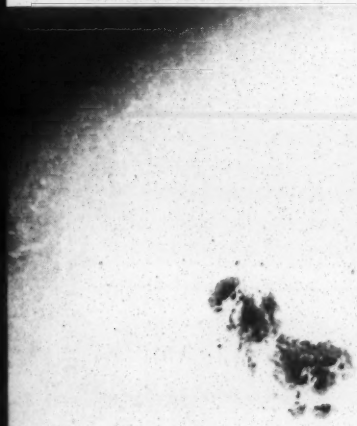
Sunspots Play Tricks

A BRITISH television program, not long ago, was interrupted by a cryptic radio voice speaking purest Brooklynese. The television channel had picked up short-wave communication between New York taxi drivers.

Similarly, an oil prospector, lugging his low-powered walkie-talkie through likely looking country in Texas, tried to call his colleagues a few miles away. Instead, he established confusing contact with another prospector in South America.

These, and hundreds of other weird radio and television manifestations, are caused by sunspots—a periodic black rash on the blazing surface of the sun. Scientists don't agree on an exact definition of a sunspot. Most describe it as an eddying storm in the sun's outer layer of gases. Like jagged, dark wounds in the sun's skin (below) they suddenly appear. Astronomers can look down into them but can't tell how deep they may go.



MOUNT WILSON OBSERVATORY

But for all the mystery, science has a good deal more information about sunspots than in days when Chinese thought they were birds flying across the sun's face. They come in cycles of about 11 years. The present cycle is due to reach its peak in late 1957 and early 1958. That's one reason for the scheduling of International Geophysical Year at this time, for IGY scientists plan intensive studies of the phenomenon.

Sunspots cause storms of magnetic force to sweep across the earth's atmosphere. They affect the electrified layer, the ionosphere, in such a way that radio broadcasts go astray. In high latitudes, skies blaze with the auroras or polar lights. Streams of cosmic rays bombard the upper air.

Since sunspots appear as dark blotches, visible to the naked eye through fog or dark glasses, one would normally think they were cooler than the surrounding surface of the sun. Actually, scientists now think they are much hotter—too hot to fall within the range of visible light. The blemishes are huge. The last peak period, early in 1947, produced a group of spots that stretched about 200,000 miles across the sun's surface.

The present peak period is expected to last some two and a half years. The sunspots are accompanied by vast eruptions mounting some 60,000 miles into the sun's atmosphere—believed to be a type of electrical discharge.

Though the earth is bathed by ultraviolet rays and its atmosphere feels the backwash of these sun storms, humans don't notice any effects except on radio communication. Some teletypes garble their messages. Short-range radios often broadcast for thousands of miles. And television sets, tuned to low-number channels, may come up with queer programs.

So next time "Disneyland" suddenly flickers and turns into a Spanish bull fight, don't send your set to be repaired. Blame the sun.—E. P.

UMI

NATIONAL GEOGRAPHIC PHOTOGRAPHER DAVID S. BOYER

Damascus claims a Christian treasure in "St. Paul's Window" (blocked up) from which Apostle was lowered

Syrians considered French rule ended during World War II. In 1944, the nation gained recognition in both the United States and Soviet Russia as an independent republic. It is a member of the Arab League—and thus can expect the traditional friendship and understanding of other League members.

Today, though the Western world's political influence in Syria has ebbed, Syrians still take for granted certain imprints of Western culture. Shops in Damascus, possibly the world's oldest continually inhabited city, offer tape recorders, machine tools, books, and novelties that would look familiar along a New York avenue. Many streets are modern, lined with clean 20th century buildings. This new section was laid out by Syrians after the French left the city. In smaller, older shops, Syrian craftsmen do leatherwork, or inlay ivory on fine tables (right). Everywhere there is a ready smile for the stranger, a quickly-offered cup of sweet coffee.—

NATIONAL GEOGRAPHIC PHOTOGRAPHER DAVID S. BOYER

National Geographic References: ***Magazine***—December 1956, "Jerusalem to Rome in the Path of St. Paul" ($1.00); December 1954, "Crusader Lands Revisited" ($1.00); December 1946, "Syria and Lebanon Taste Freedom" ($1.00). ***School Bulletins***—February 4, 1957, "Syria Faces Troubled Times" (10¢); January 24, 1955, "Ancient Damascus Keeps Pace with Modern Times" (10¢).

Spain's Delightful Balearics

Photographs by Jean and Franc Shor, National Geographic Staff

"All day long the sun shines. . . . At night one hears guitars and serenades. In short, a delightful life." Thus wrote the famed composer, Frederic Chopin, who once wintered at Majorca. Perhaps gay folk dances and smiling dark-eyed youngsters like those at left lifted the ailing genius's spirits. Today they delight flocks of tourists.

Here, off Spain's mainland, old seaside villages gaze on transparent blue waters. The ancient port of Palma, today's capital, was once vital in Mediterranean trade. Balearic seamen were famed. Prosperity slipped after Columbus discovered America. Trade began shifting to the Atlantic. But in recent years, American tourists have helped repay the loss. Costs are low, luring some to retire in the Balearics.

Majorca, the largest island, is about 60 miles long and 45 miles wide. Three-quarters of it is cultivated, more than any other Mediterranean island. Rich tomato harvests fill Spain's larders. Red peppers hang in massive strings to dry. Fields of melons and clumps of fig trees dot the landscape. In almond groves (below), workers gather ripe almonds for export by knocking them into a funnellike net.

Women, right, are skilled in handcrafts. At Artá, they placidly braid raffia beside a street-fronting window with its curtain of metal chainwork.

Majorca holds some 80 per cent of 435,000 residents of the Balearics. On smaller Minorca and tiny Iviza life is also leisurely, the sun warm, "In short . . . delightful. . . ."—J.A.

Island Smiles Match Mediterranean Sun

NATIONAL GEOGRAPHIC SOCIETY MAP

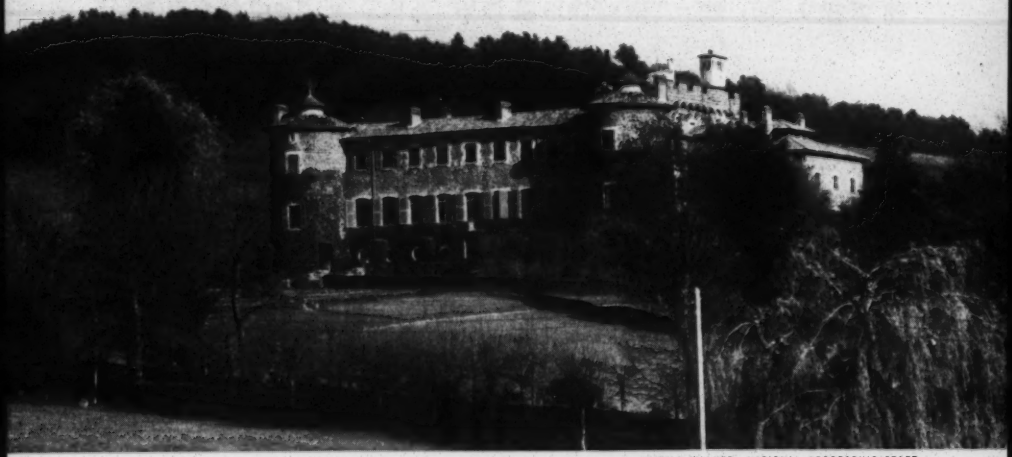
out with a musket ball in his leg. Thus tested, Lafayette took command of a division—and achieved a nickname, "The Boy," from the enemy. But with a man's anguish, he went through Valley Forge.

When France became a full-fledged ally, Lafayette returned home to raise a fleet and an army of 6,000 French troops under General Rochambeau. Back in America, he helped corner the British army of General Cornwallis at Yorktown. Lafayette heard the red-clad guardsmen drum for truce. He had fought to the end.

He returned home to acclaim. But he involved himself in the French Revolution and later became a five-year prisoner of the Austrians. On his final tour of the United States, Henry Clay told him, "General, you are in the midst of posterity." The nation lifted his failing fortunes with a $200,000 gift and some lands. He toured from New Hampshire to Georgia, to Louisiana, Kentucky, and New York. Welcoming cannon boomed in his ears, but the echoes died when he was ushered into the tent Washington had used in the war. Tears filled his eyes as the years fell back. "I remember," he murmured, "I remember."

This year, his 200th anniversary, Americans also remember.—S.H.

LAFAYETTE'S EARLY HOME, now a museum, stands in ivy-clad dignity in the Auvergne section of southern France. Here, at the Chateau of Chavaniac, the hero was born in 1757



HOWELL WALKER, NATIONAL GEOGRAPHIC STAFF

Lafayette Lives Forever on United States Maps

One way the young United States expressed its love for Lafayette was to name 56 American towns after him. His name, or variations of it, dots the maps of 29 states. There's a Fayette, Maine, and a Lafayette, California. Huge Texas and tiny Rhode Island both have a La Fayette. Here is how he is remembered in cities, towns, villages, and even crossroad settlements throughout the nation he helped form.

Lafayette appears in 13 states, *Fayette* in 13, *Fayetteville* in 14. Many states have two of these names, some all three.

Maine has a Fayette Corner, *Tennessee* a Fayette Corners, and *Michigan* a Fayette Delta.

New York contains Fayette, Fayetteville, La Fayette, and Lafayetteville. *Pennsylvania's* list reads like poetry—Fayette City, Fayetteville, La Fayette, and Lafayette Hill.

Ohio holds the record and may confuse the stranger with La Fayette, Fayetteville, Fayette, and two Lafayettes.

HOWELL WALKER, NATIONAL GEOGRAPHIC STAFF

Lafayette

Americans Remember the Nation's Oldest Friend

HIS name was Marie Joseph Paul Yves Roch Gilbert du Motier, Marquis de Lafayette, and it fitted well when, as an old man (left), he triumphantly toured the United States in 1824. Years before, the rolling syllables had seemed almost too ponderous a title for the slender 19-year-old officer who cast his lot with George Washington in the Revolutionary War.

A nobly born soldier of the King's Bodyguard of Black Musketeers, Lafayette had nevertheless become devoted to the new and world-shaking thought that all men are created equal. He saw the first test of this ideal in the American struggle. He talked with old Benjamin Franklin in Paris. Wheels turned. For a major-generalship, he signed up to serve "with all possible zeal." In that February 1777, he knew of American defeats at New York, White Plains, and New Jersey. But his boy's eyes kindled under the arched brows. "It is especially in the hour of danger that I wish to share your fortune," he told the Americans in Paris.

Relatives tried to restrain him. But Lafayette escaped through Bordeaux to Spain. With personal funds he bought the ship *La Victoire*, and sailed from the port of Pasajes in April, 1777. While soft winds drummed sails he wrote his young wife: ". . . The happiness of America is intimately connected with the happiness of all mankind; she is destined to become the safe and venerable asylum of virtue . . . and of peaceful liberty." He first saw South Carolina; then spurred 500 miles to Philadelphia —where he met Washington, destined to be his greatest friend. ". . . the majesty of his countenance and of his figure made it impossible not to recognize him," he reported.

LIBRARY OF CONGRESS

Washington, childless, eyed him as a son. He delegated experienced officers to oversee the young major-general's activities during the first year. But Lafayette's ardor couldn't be checked. At the Battle of Brandywine he led his tatterdemalion troops into the fiercest fighting and came

within minutes the wilderness creeps back with its inhabitants—deer, black bear (below), porcupines, rattlesnakes, copperheads, and a changing carnival of bird life.

From Katahdin's subarctic summits—where a third of Maine splashed with lakes lies in view—to Georgia's tilled hollows are "classrooms" of wild flowers, shrubs, and insects. The Great Smoky Mountains National Park offers vast expanses of forests where trees may never be cut. The government preserves frontier conditions of a century ago. Two-fifths of the Park is still virgin forest.

New Hampshire's White Mountains shoulder the longest unwooded section of the Trail, 19½ miles of hiking above timber line. Breath-takingly spectacular, this region can turn savage in a moment with plummeting temperature and lashing wind. Scores of rescues and far too many tragedies cram the record of Mount Washington, 6,288 feet above sea level, the tiptop of New England. But Trail travelers remember an old White Mountain saying. "If you don't like the weather, wait a minute."

Southern Pennsylvania marks the Trail's mid-point. From there, it crosses the Potomac in western Maryland, dips into West Virginia, and enters Virginia, where one-fourth of its length lies. From a mountain fire tower, hikers may look into North Carolina, West Virginia, even to one point in Tennessee. At night, they view a procession of car lights on the highway atop Natural Bridge. Pressing on, they find some of the A.T's best trails and sights in the high upheaval of the Great Smokies.

Winding, dipping, climbing, the A.T. hits its high point at Clingmans Dome (6,642 ft.) on the Tennessee-North Carolina boundary. All about brood silent, smoky peaks.

Farther along crouch the Nantahala Mountains (5,500 feet above sea level), then there is Georgia's red earth and the dome of Mount Oglethorpe—the end of the Appalachian Trail, the end of walking, the place for a look at the feet and a long look back.—S.H.

NATIONAL GEOGRAPHIC PHOTOGRAPHER ROBERT F. SISSON

BEAR MOUNTAIN, New York, is a logical place to find a bear. The symbol beside his right paw is what hikers follow from Maine to Georgia.

National Geographic References: ***Map***—United States (paper, 75 cents; fabric, $1.50). ***Magazine***—October 1952, "Pack Trip Through the Smokies" ($1.00); August 1949, "Skyline Trail from Maine to Georgia" ($1.00).

UMI

ANDREW H. BROWN, NATIONAL GEOGRAPHIC STAFF

Appalachian Trail

On It, Hikers Can Step Down the Spine of Eastern United States

CRISP autumn air and bright foliage are luring thousands of Americans to high places just now. Some will recognize the picture above—Charlies Bunion, prodding 5,400 feet through the mists of the Great Smokies on the border of Tennessee and North Carolina. Although many week-end mountaineers have climbed such eastern peaks, only relatively few have traced the entire spine of the Appalachian Mountains, from Maine to Georgia.

It can be done—it has even been done in one continuous hike—along the 2,050-mile Appalachian Trail running between Maine's Mt. Katahdin (page 24) and Georgia's 3,290-foot Mt. Oglethorpe. One of the seven wonders of the outdoorsman's world, the A.T. (as it's called) mountain-hops through 14 states, tying together surprising stretches of wilderness. Well-blazed and well-beaten, it lies within 150 miles of many populous cities—yet for mile after mile people are its rarest offering.

Occasionally, the sense of "being away from it all" dissolves while trampers skirt a town, cross a road, or hurry through a friendly farmer's field. But

From Maine's Mile-High Katahdin, the Appalachian Trail Beckons

ANDREW H. BROWN, NATIONAL GEOGRAPHIC STAFF

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